

# Human Science Perspectives on Sustainable Agriculture



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# Outline



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1. Introduction
2. Issues influencing research themes, paradigms & methodologies
3. Ongoing Studies
4. Key Findings
5. Suggested future research themes

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# INTRODUCTION



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- Human Science Perspectives on sustainable agriculture emphasize food security & rural socio-economic transformation (tracing value chains to the market);
- Seeks to address poverty, hunger, malnutrition & societal inequalities through higher levels of productivity (e.g. rural & urban divide in access to income & economic opportunities);
- Challenging the theoretical foundations on which rural transformation is based (theorising);
- Seeking to inform policy & practice;
- An Africa-wide comparative focus.

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# Main research themes & paradigms



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- Impacts/ legacy of apartheid & colonialism determine the current rural condition in RSA & other African countries;
- Spatial planning which left many communities congested in poor agro-ecological zones;
- Poorly-resourced households & communities (subsistence agric);
- Africa missing the green revolution – why & how best to remedy the situation?



# Main methodologies



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- Rapid assessments – social surveys;
- Action research & participatory diagnostic studies (usually mixing social science & bio-physical methodologies);
- Field trials - Agric extension-oriented;
- Direct observation: spending time on the selected farms & interacting with the farmers;
- A significant shift towards systems thinking & analytical approaches (requires one to think from a multidisciplinary perspective).

# Ongoing Studies



- Land redistribution to address historical inequities – successes & failures (best-practices);
- Opportunities for agric. intensification in rain-fed subsistence farming, irrigated & conservation agric;
- Augmenting available limited water resources (droughts & mid-season dry spells) through water harvesting (including catchment wide impacts);
- Impacts of climate change on production & household socio-econ conditions, esp for rain-fed agric;
- **Cross-cutting** – policies, institutions, gender dimensions, support systems (effective governance/enabling env).

# Key Findings



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- ❑ Barriers & opportunities for access to or ownership of land & water must be addressed;
- ❑ Effective support systems are needed for land & water devt & use in RSA & elsewhere (higher agric prod. levels).
- ❑ Need to address both land & water resource degradation (Env. science experts needed);
- ❑ Need to improve access to water & use by the farmers;
- ❑ Analysis of policies, institutions, gender & support systems at national & local levels essential - determine agric performance & sustainability.

# Future research themes



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1. Opportunities for improving access to land & water – appropriateness of redistribution models tried out; RWH; in-situ soil moisture & fertility conservation;
2. Sustainable land mgt to enhance agric productivity;
3. Adaptation to climate change – farming systems innovation (climate smart agric);
4. Farming systems intensification in light of limited land availability;
5. Access to transboundary water resources – implications for basin-wide governance.





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***THANK YOU FOR YOUR  
ATTENTION!***

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